Alaska LANDFIRE Reference Database

Presented by:
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N 62° 09.745' W 152° 47.763'   301° 4213 ft 08/07/2007 11:52:01 AM   Aug072007_0071

What is the LANDFIRE Reference Database (LFRDB)?

- **Compilation of geo-referenced field data describing vegetation and fuel attributes.**

- **Data were collected from many different sources and sampling methods and converted into a common database structure.**

- **Several key attributes were derived systematically from the acquired data and incorporated in the LFRDB, including existing and potential vegetation type based on Nature Serve's Ecological Systems.**

- **LANDFIRE reference data were used to generate, test, and validate maps and models for LANDFIRE National.**

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What kind of data is archived in the LFRDB?

- **Vegetation Data**
  - Natural community occurrence classifications
  - Estimates of canopy cover and height per plant taxon
  - Measurements of individual trees
 - Exotic plant information
- **Fuels Data**
  - Biomass estimates of downed woody material
  - Percent cover and height of shrub and herb layers
  - Canopy base height estimates

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Alaska LANDFIRE Reference Database

- **81,048 geo-referenced point and polygon sampling units are in the Alaska LFRDB.**

- **102 different sources of data were contributed by federal, state, and private entities.**

- **Examples of data sources archived in the AK LFRDB include the following: Alaska Earth Cover Mapping Project, NPS FirePro Program, NRCS Soil Survey Project, and USFS Forest Inventory and Analysis (FIA) Program.**

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AK LFRDB: Plot Location Map
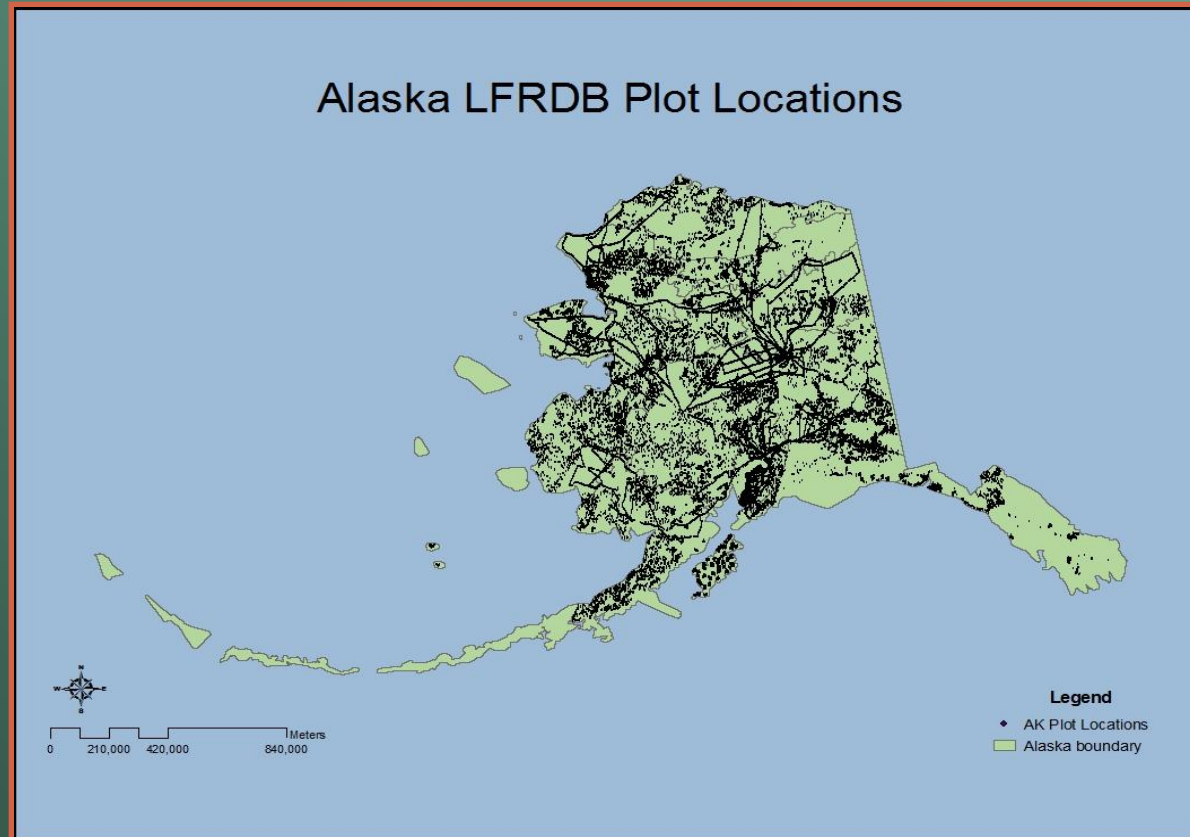
Locations of LFRDB data in Alaska excluding FIA plots.

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LFRDB: Data Types

- **Species Composition Data -** canopy cover estimates per plant taxon

- **Vegetation Structure Data -** height measurements per life form or plant taxon

- **Community Occurrence Data -** natural community or cover type classifications

- **Exotic Plant Data –** occurrence or cover estimates of exotic plants

- **Fuels Data –** composition and characteristics of surface and/or canopy fuels

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AK LFRDB: Data Types

Percent of Total Plots

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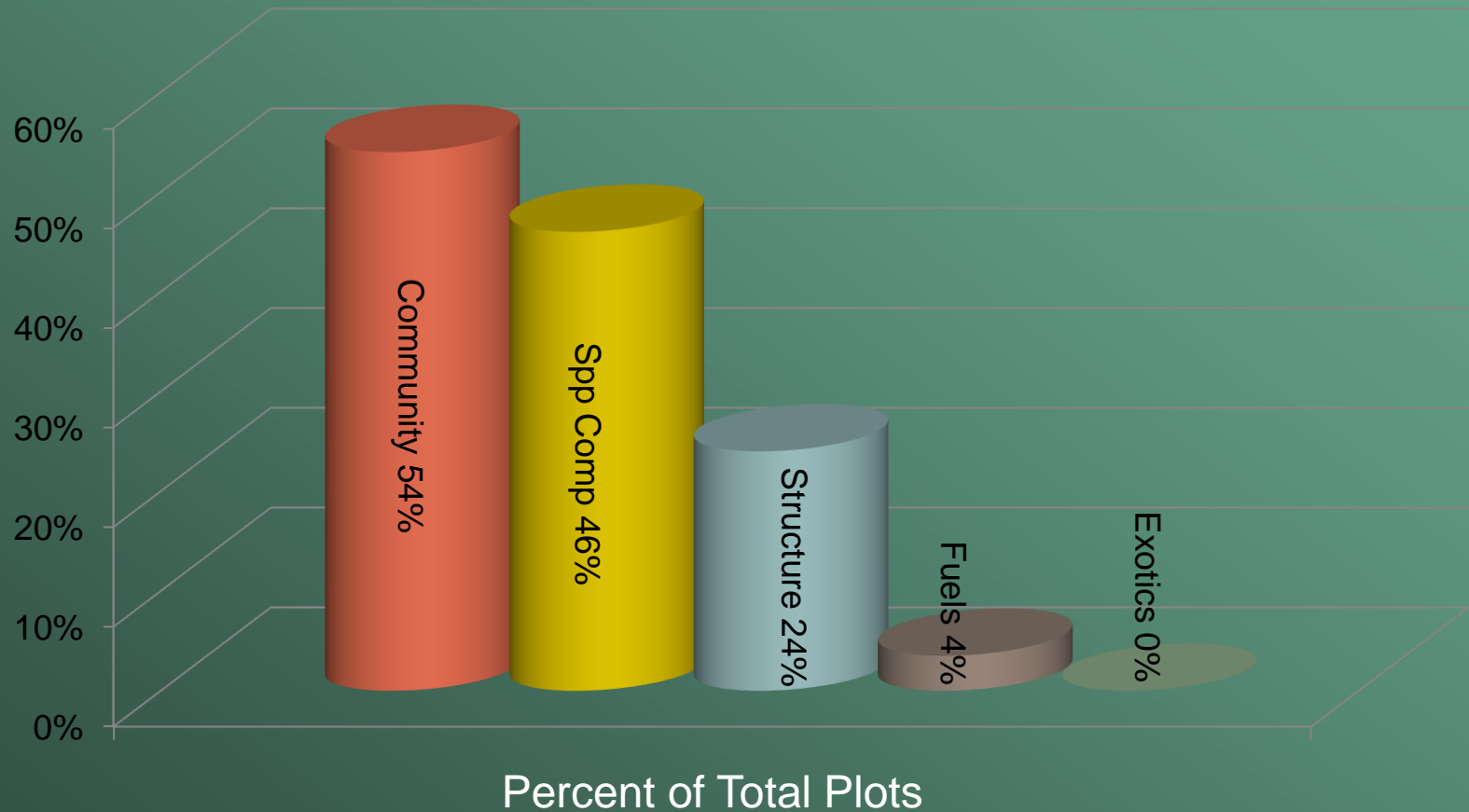
# AK LFRDB: Polygon vs. Point Data
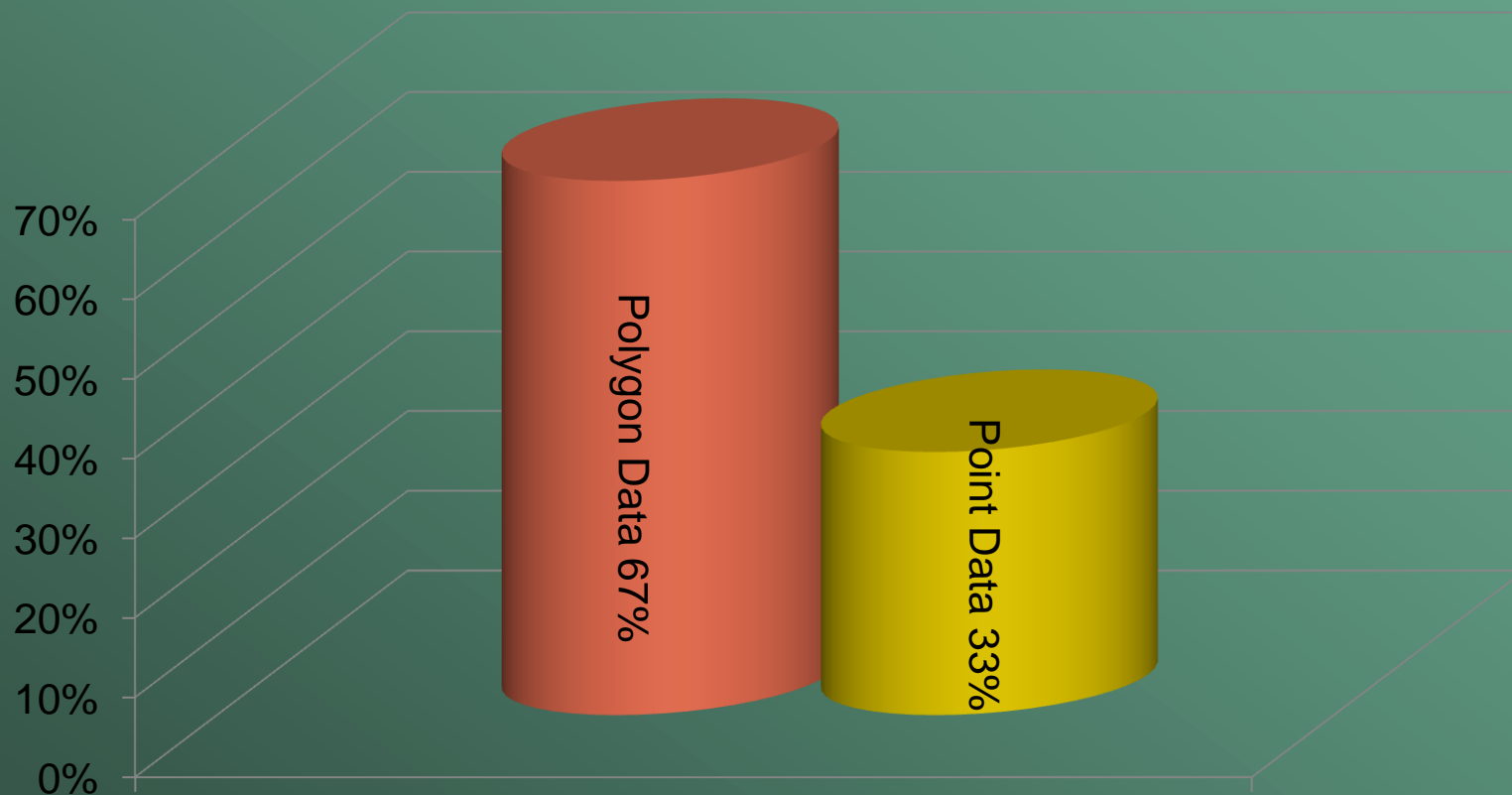
Percent of Polygon vs. Point Data
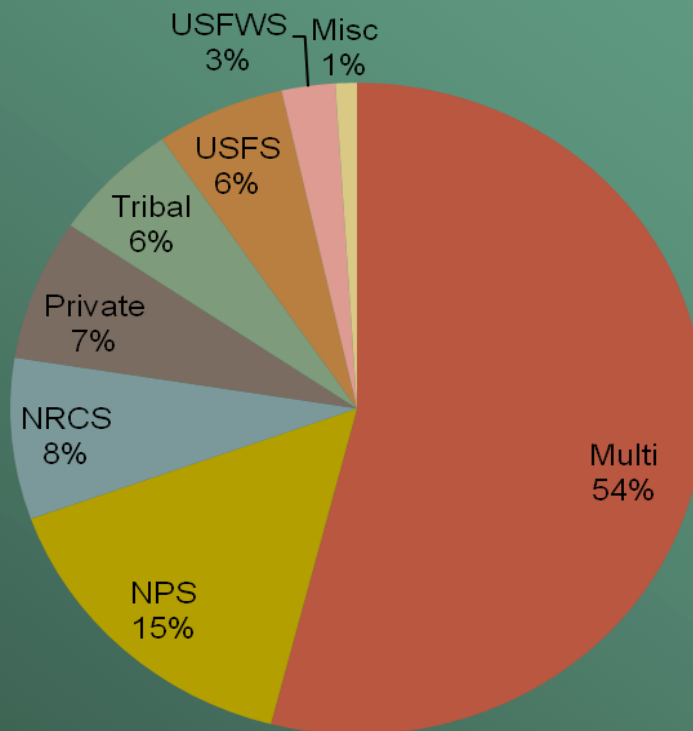
AK LFRDB: Data Utility

- **Approximately half the sampling units archived in the Alaska LFRDB were unusable for mapping. Examples of unusable data include the following:**
  - **Species composition records with insufficient species information to key to LANDFIRE Existing Vegetation Type (EVT).**

  - **Community occurrence records with community labels that were unable to be cross-walked to LANDFIRE Existing Vegetation Type (EVT).**

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AK LFRDB: Data Utility EVT Mapping

■ Used for Mapping ■ Discarded for Mapping

■ Used for Mapping ■ Discarded for Mapping
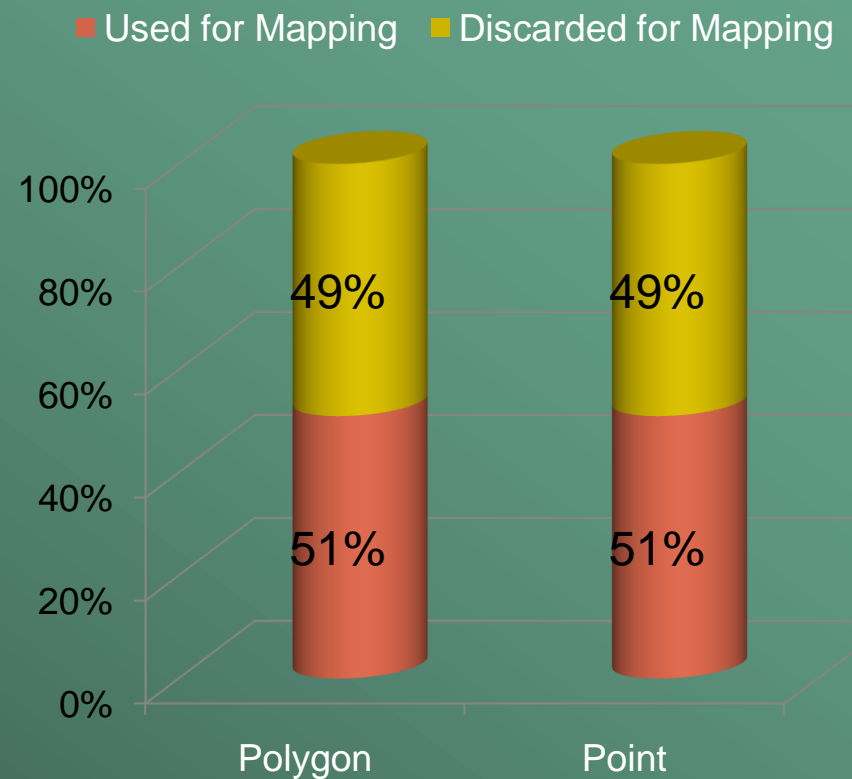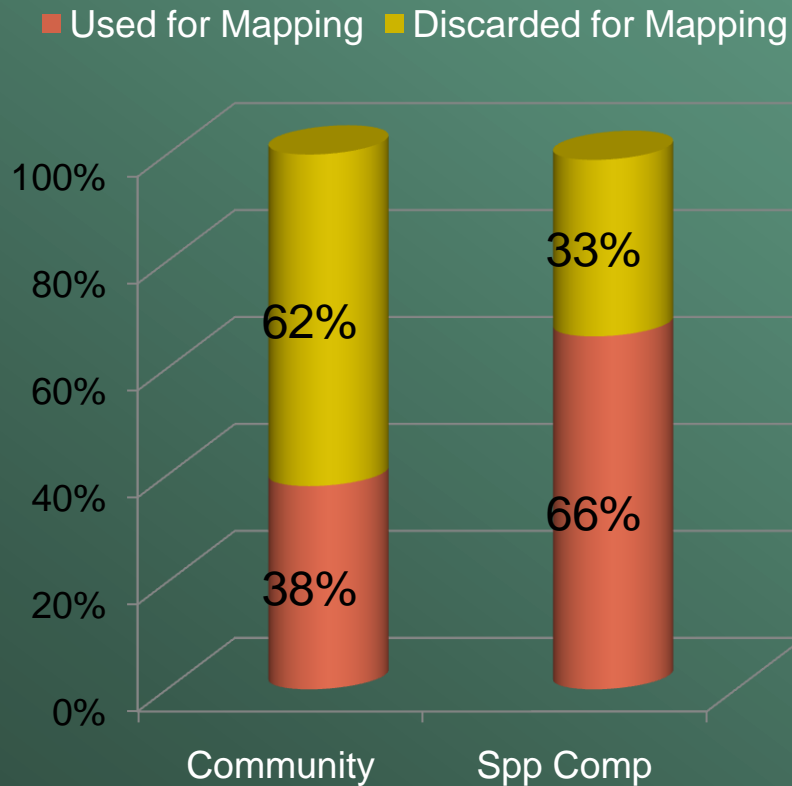
AK LFRDB: Data Contributors

Data Contributor Affiliation

- USFWS 3%
- Misc 1%
- USFS 6%
- Tribal 6%
- Private 7%
- NRCS 8%
- NPS 15%
- Multi 54%

The percent of total plots in the AK LFRDB that can be accredited to various agencies.
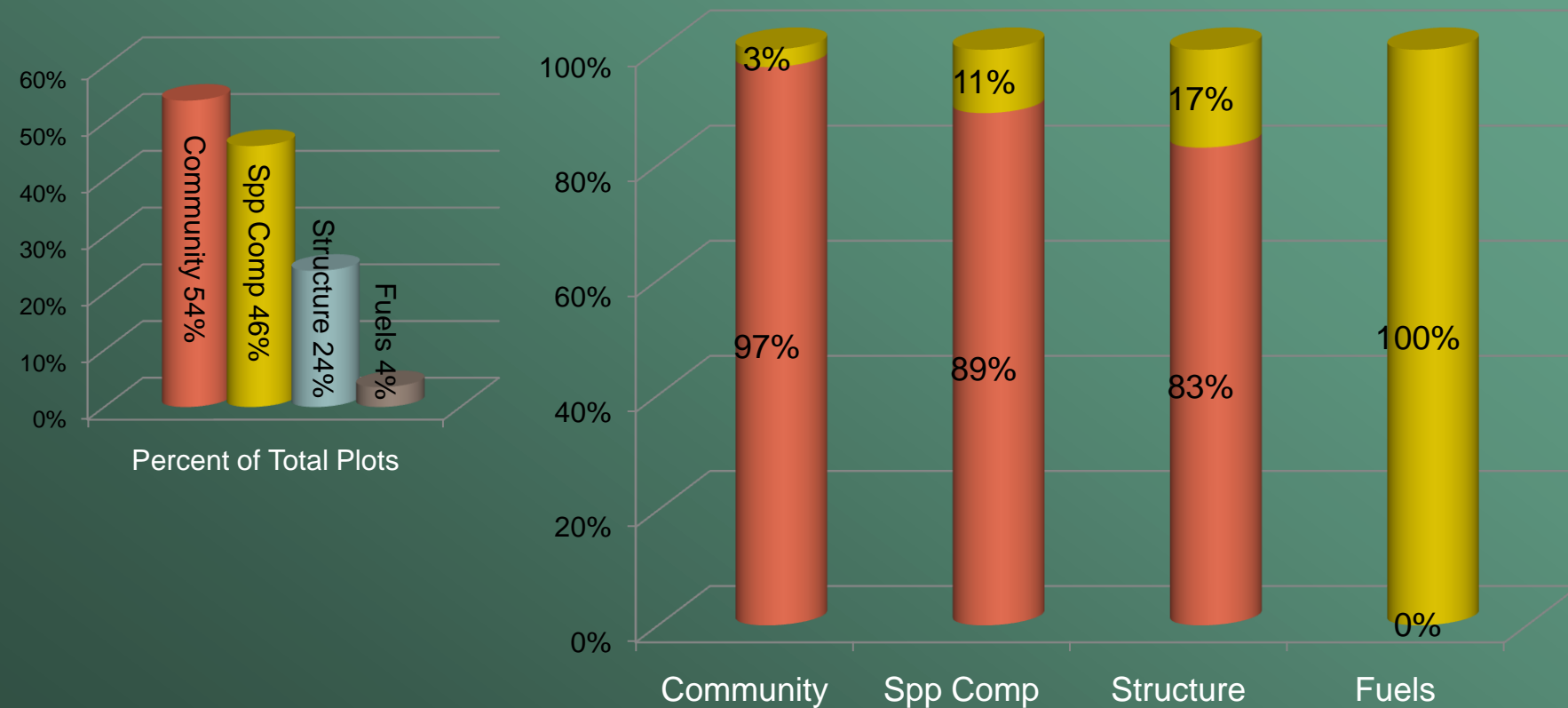
AK Data Call: Overview

- **93% of the data in the Alaska LFRDB were submitted in response to the LANDFIRE data call.**

- **7% of the data were acquired by LANDFIRE personnel through direct data sharing agreements (USFS FIA), websites (FIREHouse), or agency database systems (USFS NRIS FSVeg).**

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AK Data Call: Data Contributors
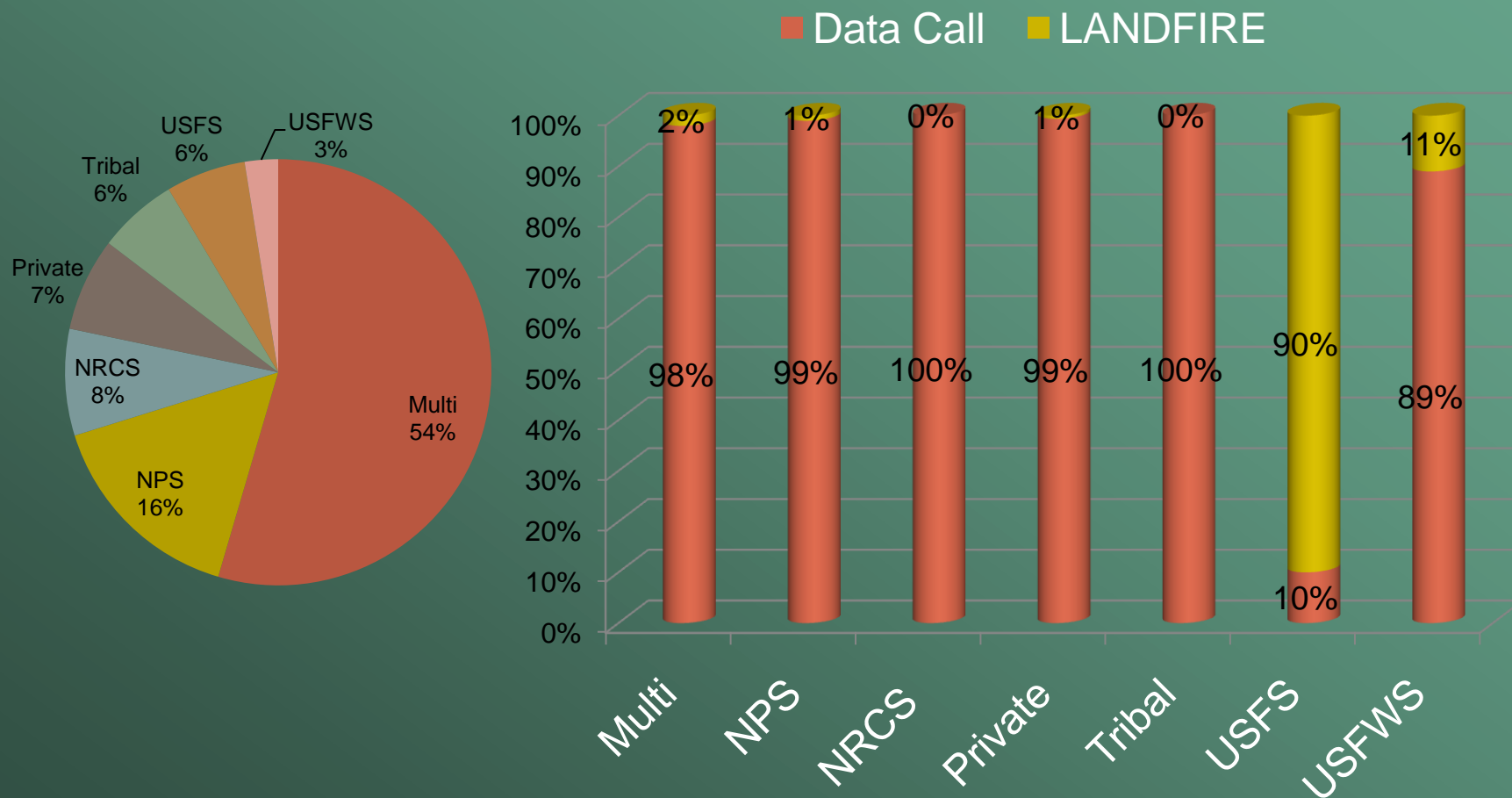
AK Data Call: Data Types

AK LFRDB: Conclusions

- **There is a significant amount of vegetation data archived in the Alaska LFRDB.**

- **Data were compiled from many different sources.**

- **Approximately half the sampling units archived in the Alaska LFRDB were unusable for mapping.**

- **Data call submissions were crucial and accounted for the majority of the data in the Alaska LFRDB.**

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Public LFRDB

- **A subset of the field-sampled data used in the production of LANDFIRE National deliverables is available for public use.**

- **Certain proprietary or otherwise sensitive data have been removed from the public LFRDB.**

- **The public versions of the LANDFIRE Reference Database can be downloaded by geographic area from www.landfire.gov.**

- **The Alaska Public LFRDB contains 43,975 geo-referenced sampling units.**

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LANDFIRE Updates

- **LANDFIRE is now in the Operations and Management phase of the program in which map layers will continue to be updated to reflect recent changes in landscape conditions resulting from natural disturbances and management activities.**

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LANDFIRE Refresh

- **The first round of updates, termed LANDFIRE Refresh, is now underway.**

- **Polygon data describing natural disturbance and management events occurring between 1999 and 2008 have been collected and processed in order to map changes across the landscape.**

- **In the future, the event data will be available to the public for download from www.landfire.gov.**

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LANDFIRE Data Needs

LANDFIRE will continue to need data for subsequent updates:

- **Polygon data describing recent natural disturbances and management activities.**

- **Point or polygon vegetation or fuel plot data along with any associated digital photos, project descriptions, or final reports.**

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